

WHAT IS CLAIMED IS:

1. An isolated nucleic acid comprising SEQ ID NO:1, or a complementary sequence, fragment, or analog thereof.
2. An isolated nucleic acid consisting of SEQ ID NO:1, or a complementary sequence, fragment, or analog thereof.
3. A vector comprising the nucleic acid molecule of claim 1.
4. A cell comprising the nucleic acid molecule of claim 1.
5. An isolated polypeptide encoded by the nucleic acid comprising SEQ ID NO:1, or a degenerate sequence, fragment, or analog thereof.
6. An isolated polypeptide encoded by the nucleic acid consisting of SEQ ID NO:1, or a degenerate sequence, fragment, or analog thereof.
7. An isolated polypeptide comprising SEQ ID NO:2, or a fragment or analog thereof.
8. The polypeptide of claim 7, wherein the analog comprises conservative amino acid substitutions.
9. An isolated polypeptide consisting of SEQ ID NO:2, or a fragment or analog thereof.
10. The polypeptide of claim 9, wherein the analog comprises conservative amino acid substitutions.
11. A method of reducing cell division, the method comprising administering to a cell an amount of a centriolin modulator effective to disrupting microtubule organization in the cell, wherein cell division is reduced.
12. The method of claim 11, wherein the centriolin modulator is an RNAi.
13. The method of claim 11, wherein the centriolin modulator is an siRNA.
14. The method of claim 13, wherein the siRNA is SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, or SEQ ID NO:15.
15. The method of claim 11, wherein the centriolin modulator is an antisense nucleic acid.
16. The method of claim 11, wherein the centriolin modulator is a ribozyme.
17. The method of claim 11, wherein the centriolin modulator is an antibody.
18. The method of claim 17, wherein the antibody is produced *in vivo*.
19. The method of claim 17, wherein the antibody is produced *in vitro*.

- 30 20. The method of claim 11, wherein cell division is reduced to treat cancer, leukemia,
31 psoriasis, Hodgkin's disease, lymphoma, myelofibrosis, polycythemia vera, or another
32 cell proliferative disorder.
- 33 21. A method of reducing cell division, the method comprising administering to a cell an
34 amount of a pericentrin-B modulator effective to disrupt microtubule organization in the
35 cell, wherein cell division is reduced.
- 36 22. The method of claim 21, wherein the pericentrin-B modulator is an RNAi.
- 37 23. The method of claim 21, wherein the pericentrin-B modulator is an siRNA.
- 38 24. The method of claim 23, wherein the siRNA is SEQ ID NO:16, SEQ ID NO:17, SEQ ID
39 NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, or SEQ ID
40 NO:23.
- 41 25. The method of claim 21, wherein the pericentrin-B modulator is an antisense nucleic
42 acid.
- 43 26. The method of claim 21, wherein the pericentrin-B modulator is a ribozyme.
- 44 27. The method of claim 21, wherein the pericentrin-B modulator is an antibody.
- 45 28. The method of claim 27, wherein the antibody is produced *in vivo*.
- 46 29. The method of claim 27, wherein the antibody is produced *in vitro*.
- 47 30. The method of claim 21, wherein cell division is reduced to treat cancer, leukemia,
48 psoriasis, Hodgkin's disease, lymphoma, myelofibrosis, polycythemia vera, or another
49 cell proliferative disorder.
- 50 31. A method of treating abnormal centrosome function in a cell, the method comprising
51 administering to the cell an amount of centriolin effective to restore normal centrosome
52 function, wherein normal centrosome function is restored.
- 53 32. A method of treating abnormal centrosome function in a cell, the method comprising
54 administering to the cell an amount of pericentrin-B effective to restore normal
55 centrosome function, wherein normal centrosome function is restored.